CLAIMS

1. A textile material with antenna components of an HF transponder which may be operated by connection of a circuit module to the antenna components which are tuned or may be tuned to a working frequency, characterised in that the antenna components consist of electrically conductive components of the textile material itself which may be formed as an E-field antenna, using the geometry thereof to match a working frequency in the UHF or microwave range, or by interruption or extension of a conductive section.

2. The textile material according to claim 1, characterised in that the antenna components are arranged singly or multiply and mutually spaced.

3. The textile material according to claim 1 or claim 2, characterised in that the antenna components are arranged in web-like material in the web direction of the web and/or obliquely to the web direction and/or transverse to the web direction.

4. The textile material according to any one of claims 1 to 3, characterised in that the antenna components form at least one symmetrical $\lambda/2$ dipole or at least one $\lambda/4$ groundplane comprising a $\lambda/4$ antenna and a counterpoise, wherein λ corresponds to the wavelength of the working frequency.

5. The textile material according to any one of claims 1 to 4, characterised in that the electrically conductive components of the textile material are electrically conductive printing paste or electrically conducting thread structures which can be processed mechanically within a normal production process for the textile industry.

6. The textile material according to claim 5, characterised in that the electrically conductive thread structure is a metal-coated plastic thread, a plastic thread wound with metal wire or a metal stranded wire, a plastic thread with a built-in metal wire or a built-in metal stranded wire or a graphite thread.

7. The textile material according to claim 6, characterised in that the electrically conductive thread structure comprises continuously conducting threads which can be separated at connection points and antenna ends.

8. The textile material according to claim 7, characterised in that adjacent threads can be separated when connecting a circuit module.

9. The textile material according to claim 6, characterised in that the electrically conductive thread structure comprises partially conducting threads between connection points and antenna ends.

10. The textile material according to any one of claims 6 to 9, characterised in that the threads come to the surface of the textile material at outlet points which correspond to the position of connection points and antenna ends and continuously conducting threads can be separated here.

11. The textile material according to claim 10, characterised in that the outlet points have a spacing of $\lambda/4$ of the wavelength of the working frequency.

12. The textile material according to any one of claims 1 to 11, characterised in that antenna components

comprise at least one connection point for connection to antenna connections of the circuit module by crimp connections, welded connections, soldered connections or adhesive connections using conductive adhesive.

13. The textile material according to claim 5, characterised in that during the printing production process, the conductive adhesive is formed by the printing paste itself.

14. The textile material according to claim 12 or claim 13, characterised in that adhesive surfaces of adhesive compounds are UV-permeable and the conductive adhesive is UV curable.

15. The textile material according to any one of claims 1 to 14, characterised in that the circuit module itself and its antenna connections are enclosed by a potting compound and the potting compound is at the same time connected to the region of the textile material adjacent to the circuit module for mechanical fixing of the circuit module and/or increasing the security against tampering.

16. The textile material according to any one of claims 1 to 15, characterised in that a placement area for a circuit module is specified in a pre-cut section of textile material and the circuit module can be connected to a connection point located in this placement area and fixed therein for identification of the pre-cut section or the finished goods.

17. The textile material according to any one of claims 1 to 15, characterised in that in raw goods of the textile material a placement area for a circuit module is preferably specified in the edge area of the goods and the circuit module can be connected to a

connection point located in this placement area and fixed therein for identification of the raw goods.